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Industrial electroheat equipment - Test methods for electroslag remelting furnaces

Industrielle Elektrowärmeanlagen - Prüfverfahren für Elektroschlacke-Umschmelzöfen

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Equipements électrothermiques industriels - Méthodes d'essai des fours de refusion sous laitier électroconducteur (standards.itén.al)

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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 25.180.10

Supersedes HD 470 S1:1987

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Industrial electroheat equipment – Test methods for electroslag remelting furnaces

(IEC 60779:2005)

Equipements électrothermiques industriels –
Méthodes d'essai des fours de refusion sous laitier électroconducteur (CEI 60779:2005)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member 62-4d66-b365-

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 27/474/FDIS, future edition 2 of IEC 60779, prepared by IEC TC 27, Industrial electroheating equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60779 on 2005-11-01.

This European Standard supersedes HD 470 S1:1987.

The significant technical changes with respect to HD 470 S1:1987 are the additional technical tests described in 5.1, 5.2, 5.3, 5.9, 5.10, 5.11, 5.13, 5.14 and 5.15.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2006-08-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2008-11-01

Annex ZA has been added by CENELEC.

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(SEndorsement notice i)

The text of the International Standard IE<u>C 60779:20052was</u> approved by CENELEC as a European Standard without any modification, itch.ai/catalog/standards/sist/f934cfc3-a262-4d66-b365-239423f7a989/sist-en-60779-2007

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60050-841	2004	International electrotechnical vocabulary Part 841: Industrial electroheat	-	-
IEC 60398	1999	Industrial electroheating installations - General test methods	EN 60398	1999
IEC 60676	2002	Industrial electroheating equipment - Test methods for direct arc furnaces	EN 60676	2002

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NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60779

Deuxième édition Second edition 2005-08

Equipements électrothermiques industriels – Méthodes d'essai des fours de refusion sous laitier électroconducteur

Industrial electroheat equipment – Test methods for electroslag remelting furnaces ten.al)

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CODE PRIX PRICE CODE



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL ELECTROHEAT EQUIPMENT – TEST METHODS FOR ELECTROSLAG REMELTING FURNACES

FOREWORD

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International Standard IEC 60779 has been prepared by IEC technical committee 27: Industrial electroheating equipment.

This second edition cancels and replaces the first edition published in 1983 and constitutes a technical revision.

The significant technical changes with respect to the previous edition are the additional technical tests described in 5.1, 5.2, 5.3, 5.9, 5.10, 5.11, 5.13, 5.14 and 5.15.

The text of this standard is based on the following documents:

FDIS	Report on voting
27/474/FDIS	27/494/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under http://webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- · amended.

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INDUSTRIAL ELECTROHEAT EQUIPMENT – TEST METHODS FOR ELECTROSLAG REMELTING FURNACES

1 Scope and object

This International Standard applies to industrial electroslag remelting furnaces, the rated capacity of which is equal to, or greater than, 50 kg.

This standard is applicable to industrial electroslag remelting furnaces having one or more electrodes and having different melting power supplies, such as alternating current, direct current, or low-frequency current.

The object of this standard is the standardization of electroslag remelting furnace test conditions and methods to determine the main parameters and technical characteristics.

This standard does not cover all possible test methods which may be carried out for the technical and economic assessment of furnaces.

2 Normative references STANDARD PREVIEW

The following referenced documents are indispensable for the application of this document. For dated references, only the edition applies. For undated references, the latest edition of the referenced documents (including any amendments) applies.

https://standards.iteh.ai/catalog/standards/sist/f934cfc3-a262-4d66-b365-

IEC 60050-841:2004, International 42 Electrotechnical 79 Vocabulary – Part 841: Industrial electroheat

IEC 60398:1999, Industrial electroheating installations – General test methods

IEC 60676:2002, Industrial electroheating equipment – Test methods for direct arc furnaces

3 Terms and definitions

For the purposes of this document, the following terms and definitions, as well as those given in IEC 60050-841 and IEC 60676, apply.

3.1

electroslag remelting furnace

remelting furnace in which the charge, usually a consumable electrode, is remelted by direct resistance heating of an electrical conductive molten slag

NOTE The slag is contained in a mould (crucible).

3.2

electroheat installation with an electroslag remelting furnace

complete assembly of electroheat equipment and electrical and mechanical accessories necessary for operation and utilization of an electroslag remelting furnace